

## Planting ferns for pleasure

MARTHA H. HOLLINSHEAD

The rootstock is the thing to consider when planning a fern garden at home. It takes experience to move wild plants to tame places. Suitable soil, shade, and moisture are necessary but the root system must have room to develop.

*Dennstaedtia* has a hardy, branching rootstock which monopolizes the space assigned to it and some of it has to be uprooted from time to time to keep it in bounds. It is a good fern to transplant because it is so adaptable. It grows in the sun by roadside ditches and in stony pastures. It grows in the shade and hangs its green drapery over the rocky sides of glens where there are waterfalls. The frond is beautifully cut, light green in color, bleaching in age to straw color. The light green mingles pleasingly with the bluish-green *Aspidiums* in the woods. The frond tapers toward the apex and occasionally there is a forked specimen, like one I found at Buck Hill Falls. Always it has its characteristic odor, which is not like hay at all. Only one species, *D. punctilobula*, is native to the United States and Canada; others are found all over the world from the Himalayas to the Andes and south to Madagascar. It is such an interesting fern that it should not be exiled from the home grounds even though its rooting system is so exasperating.

The Cinnamon Fern has a rootstock that creeps along just below the surface of the soil, dies off at one end, shows scars of old crowns in the middle and sends up a new crown of fronds each year from the living portion. This takes space. In suitable surroundings *Osmunda cinnamomea* will live twenty-five years or more after transplanting and holds its own in a bed where lily of the valley, ivy, and spurge are sharing the sustenance but it does not grow six feet tall as when better fed. It starts to grow in April and clothed in wool, remains almost stationary if the weather is cold and stormy. If it is warm and sunny the fern may grow a foot high by the end of the month. The sporangia are dehiscent by the middle of June. Late September frosts turn the fronds brown, though when sheltered they may linger on into November.

Nearly forty years ago some Interrupted Ferns were dug up in a meadow, hauled in a barrow and planted in a sheltered

corner of a house. They are flourishing today, dominating the place and leaving no room for weeds to grow. The only other plant among them is a sturdy Jack-in-the-Pulpit which was probably planted when they were. The soil was suitable as the house is on the edge of a wood. Every year the ferns grow a crop of spores in the middle of the frond. The sporangia are mature in May but there are quantities of brown spores to be had in August. The forty years does not mean the age of the ferns for the clumps were large when transplanted. They are huge now and the fronds suggest palm leaves, the connecting rootstock is four inches thick.

From the porch to the drive was a boardwalk. *Onoclea sensibilis* grew under this and peeped up between the boards. There is no record of their planting but topsoil was brought from the nearby woodland to make the terrace and the fern roots probably came with it. Sheltered by the boardwalk which also conserved moisture a number of sensitive ferns appeared. The grass and lawn mower finished the rest. Now the boards are gone, the path is little used and the ferns are dwarfed and impoverished. They miss the weekly drenching when the laundry tubs were emptied. Thirty-five years is not bad for age, however. Three different fern gardeners have told me that they did not know how they acquired *O. sensibilis*. Like Topsy it just grew. It is no trouble and satisfactory in the fern bed. It sometimes holds its spores until the following year thus prolonging its power of reproduction. The sterile fronds turn pale after even a light frost; the fertile stand upright through the winter.

One enthusiastic fern transplanter reports a dozen kinds "all doing nicely." Among them are the Ostrich Fern, Royal Fern, Chain Fern, and Crested Shield Fern. Her *Adiantum* with its dark stipe and black roots sends up fresh fronds all summer "year after year." Another discriminating fern lover set out *Pellaea atropurpurea* next the wall of the house, bolstered it with a piece of coral and pieces of limestone rock and has enjoyed it for eleven years. Her walking fern survived long enough to root from the tip twice. The New York Fern and the Lady Fern, though re-transplanted, are fifteen years old. The Royal Fern is twenty-five; the *Dennstaedtia* has twenty transplanted years.

*Osmunda regalis* is not so easy to grow as its plebeian rela-

tives, for it naturally is found at the water's edge and needs wet soil. It calls for a pool which is not always available. The rootstock is often erect and sends out branches; from these, new crowns grow. Thus the clump may be divided for more plants. Traveling by rail from Yarmouth to Halifax one sees *O. regalis* growing in profusion adding much to the beauty of the landscape and so there is no surprise in seeing the fern featured in the Public Gardens of Halifax.

An effective planting of *Pteris latiuscula* was among rhododendrons which were planted as a hedge to screen the street from a city lot. The ferns grew tall and rather sparsely, the rhododendrons and tree roots seeming to keep the fern roots in check; for the bracken has a rootstock that is smooth, long, and creeping. It is difficult to dig up and once established difficult to get rid of. It can burrow downward for several feet it meets an obstruction and pass under the same or it may creep around it. One is sometimes surprised to find shrubby *Pteris* plants in a potato patch or a sandy wood-road through a woodland. One planting of *Pteris* usually satisfies the owner of a fern garden.

Bracken in British Columbia grows in great thickets and does not by choice (although it grows there) inhabit neglected, half cultivated land. It reaches its greatest luxuriance in rich forest mold along trails, by streams and rocky hollows where sun and air reach it fully. I have seen it growing beside young hemlocks and rivaling them until they were eight or ten feet tall. Many a fire-hollowed tree trunk had a bracken growing from its centre. On the other hand a scrubby growth of this fern may appear on a burned over hill top where there are no other plants except dog-bane, wild strawberry and *Listera* under the coming growth of scanty pines. Though a coarse fern it is very beautiful when a scattered growth of it is seen on a hillside. I, personally, would not omit it from the fern garden. It is so self-reliant.

There are many other ferns besides those mentioned that will grow well for the amateur. Given space enough and running water a real fernery could be established where one would be tempted to collect, for example, variations of lady fern or make picturesque plantings of evergreen species for Winter enjoyment.

MOORESTOWN, N. J.